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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,263	02/12/2004	Kazuo Aoki	JP9-2002-0244US1 (466)	5410
40987	7590	06/11/2008		
AKERMAN SENTERFITT P. O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER SIEDLER, DOROTHY S	
			ART UNIT	PAPER NUMBER
			2626	
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			06/11/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/777,263	<b>Applicant(s)</b> AOKI ET AL.	
	<b>Examiner</b> Dorothy Sarah Siedler	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 28, 2008 has been entered.

### ***Response to Arguments***

Applicant has successfully amended claims 1, 3, 5-9, 10, 13, 15 and 16, and as such the 35 U.S.C. 112 2<sup>nd</sup> rejections are withdrawn.

Applicant's arguments with respect to claims 1, 3-10 and 12 - 15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 13 recites the limitation "said header words" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yokogawa** (5,225,981) in view of **Morimoto** (5,396,419).

As per claims 1, 7, 10 and 13 **Yokogawa** discloses a morphological analyzer for performing a morphological analysis on a natural language text to be processed, comprising:

A morphological analysis means for performing a morphological analysis on an input text string to be processed (column 10 lines 44-55); and

Application execution means for performing said processing for said input text string morphologically analyzed by said morphological analysis means (column 10 lines 44-55), said morphological analysis means comprising:

a dictionary unit storing token information comprising at least one attribute flag (column 12 lines 23-37, *a word dictionary stores grammatical information for each entry word, including inflectional information, as well as a highest preference flag*);

a token list generating unit for referencing token information in said dictionary unit, extracting tokens that can form natural language text from said input text string, and registering said extracted tokens in a token list (column 10 lines 44-55 and column 12 lines 1-15, *a morphological analysis section processes the sentence by referring to the word dictionary, this analysis saved in the retrieved dictionary buffer*); and

a token string selecting unit for selecting optimum token strings for composing said natural language text on the basis of the token list generated by said token list generating unit (column 10 line 67 – column 11 line 5 and column 13 lines 34-37 and lines 49-61, *the input character array is processed in terms of the highest preference flag (imposed condition), then a contradiction for the highest preference flag is eliminated; next, the input data and the dictionary information are sent to the parsing section I and then II, where structure is applied to the data to determine a solution, or a parse tree*). However, **Yokogawa** does not disclose wherein the morphological analyzer is configured to accept a setting command from a user interface of an application using the morphological analyzer, wherein said token list generating unit of the morphological analyzer is configured to register an extracted token that corresponds to a complex word only if the setting command indicates that complex words are not to be decomposed. **Morimoto** discloses a system that uses user input to determine which complex words should be added to a dictionary (column 2 lines 50-60). Complex word

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candidates are determined and then displayed to the user, who then designates (setting command) which complex words is added to the recognition dictionary.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have a morphological analyzer configured to accept a setting command from a user interface of an application using the morphological analyzer, wherein said token list generating unit of the morphological analyzer is configured to register an extracted token that corresponds to a complex word only if the setting command indicates that complex words are not to be decomposed in **Yokogawa**, since it would provide an enhanced dictionary, improving translation and parsing, while minimizing memory requirements.

As per claims 5, 12 and 15, **Yokogawa** discloses a morphological analyzer for performing a morphological analysis on a natural language text to be processed, comprising:

token list generation means for decomposing an input text string to be processed into tokens that are components of the natural language text and selectively registering said tokens in a token list (column 10 lines 44-55, *a morphological analysis section derives the sentence by referring to the word dictionary. During this analysis, the input character array is processed in terms of the highest preference flag (imposed condition), then a contradiction for the highest preference flag is eliminated*); and

token string selection means for selecting optimum token strings for composing said natural language text on the basis of the token list generated by said token list generation means (column 10 line 67 – column 11 line 5 and column 13 lines 34-37, *the input character array is processed in terms of the highest preference flag (imposed condition), then a contradiction for the highest preference flag is eliminated. After the morphological analysis, the input data and the dictionary information are sent to the parsing section I and then II, where structure is applied to the data to determine a solution, or a parse tree*). However, **Yokogawa** does not disclose wherein the morphological analyzer is configured to accept a setting command from a user interface of an application using the morphological analyzer, wherein said token list generating unit of the morphological analyzer is configured to register an extracted token that corresponds to a complex word only if the setting command indicates that complex words are not to be decomposed. **Morimoto** discloses a system that uses user input to determine which complex words should be added to a dictionary (column 2 lines 50-60). Complex word candidates are determined and then displayed to the user, who then designates (setting command) which complex words is added to the recognition dictionary.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have a morphological analyzer configured to accept a setting command from a user interface of an application using the morphological analyzer, wherein said token list generating unit of the morphological analyzer is configured to register an extracted token that corresponds to a complex word only if the setting

command indicates that complex words are not to be decomposed in **Yokogawa**, since it would provide an enhanced dictionary, improving translation and parsing, while minimizing memory requirements.

As per claims 3, 6 and 8, **Yokogawa** discloses the morphological analyzer according to claims 1, 5 and 7, wherein said token information comprises at least one stored token and said at least one attribution flag comprises a decomposition flag corresponding to the at least one stored token (column 12 lines 23-37 and column 13 lines 34-37, *the word dictionary contains an entry for a highest preference flag, which uses a '1' or '0' to indicate weak or strong coupling (decomposable). This is used to determine the compound word or phrase used in the sentence*). **Yokogawa** does not disclose wherein the morphological analyzer is configured to register an extracted token corresponding to the at least one stored token only if the decomposition flag indicates that the at least one stored token is not decomposable. However, **Yokogawa** does disclose that for words determined to be compound words, the dictionary information for individual words is discarded (column 13 lines 35-40).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to configure the morphological analyzer to register extracted tokens only if the decomposition flag indicates that the at least one stored token is decomposable in **Yokogawa**, since it would provide an enhanced dictionary, improving translation and parsing, while minimizing memory requirements.



As per claims 4 and 9, **Yokogawa** discloses the morphological analyzer according to claims 1 and 7, wherein the token information comprises a plurality of stored tokens and wherein the attribute flag comprises a plurality of attribute flags corresponding to a plurality of different attributes for each of the plurality of stored tokens (column 12 lines 23-37 and column 13 lines 34-37, *the word dictionary contains an entry for a highest preference flag, which uses a '1' or '0' to indicate weak or strong coupling, as well as additional information such as part of speech and countability or uncountability*).

As per claim 14, **Yokogawa** discloses the computer-readable medium according to claim 13, but **Yokogawa** does not disclose wherein said registering step further comprising deciding whether to register said selected token corresponding to a complex word on said token list based on a value of said attribute flag indicating whether said token is decomposable (column 12 lines 23-37 and column 13 lines 34-37, *the word dictionary contains an entry for a highest preference flag, which uses a '1' or '0' to indicate weak or strong coupling, as well as additional information such as part of speech and countability or uncountability*). However, **Yokogawa** does disclose that for words determined to be compound words, the dictionary information for individual words is discarded (column 13 lines 35-40).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to register said selected token corresponding to a complex word on said

token list based on a value of said attribute flag indicating whether said token is decomposable in **Yokogawa**, since it would provide an enhanced dictionary, improving translation and parsing, while minimizing memory requirements.

As per claim 16, **Yokogawa** discloses the program according to claim 15, further comprising code sections for:

imposing at least other one condition on the morphological analysis, analyzing said tokens using the other conditions imposed on the morphological analysis, and instead of registering said tokens by said token group, registering only said tokens in said token list in accordance with said other imposed conditions (column 12 lines 23-37 and column 13 lines 34-37, *the word dictionary contains an entry for a highest preference flag, which uses a '1' or '0' to indicate weak or strong coupling (decomposable). Also, if a strong coupling does not exist between possible compound words or phrases, individual words are considered (indecomposable words)*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Sarah Siedler whose telephone number is 571-270-1067. The examiner can normally be reached on Mon-Thur 9:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSS

/Richmond Dorvil/  
Supervisory Patent Examiner, Art Unit 2626